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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/019,823	06/12/2002	Jonathan Griffin	SYN-128	9917
22847 7:	590 04/11/2005		EXAMINER	
	BIOTECHNOLOGY	ROOKE, AGNES BEATA		
PATENT DEP.			ART UNIT	PAPER NUMBER
P.O. BOX 12257			1653 .	
RESEARCH TRIANGLE PARK, NC 27709-2257			DATE MAILED: 04/11/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		10/019,823	GRIFFIN ET AL.
		Examiner	Art Unit
		Agnes B Rooke	1653
Period fo	 The MAILING DATE of this communication apport Reply 	ears on the cover sheet with the c	orrespondence address
THE I - Externanter - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we re to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
Status			
2a)□	Responsive to communication(s) filed on This action is FINAL . 2b) This Since this application is in condition for allowan closed in accordance with the practice under <i>E</i>	action is non-final. ace except for formal matters, pro	
Dispositi	on of Claims		
5)□ 6)⊠ 7)□	Claim(s) <u>1-3,6-8,12-14,36,41-44 and 48</u> is/are plants of the above claim(s) <u>9-11,15-35,37-40,45,45</u> . Claim(s) is/are allowed. Claim(s) <u>1-3,6-8,12-14,36,41-44 and 48</u> is/are plants of the company of the com	46 and 49-51 is/are withdrawn from	om consideration.
Applicati	on Papers		
9) 10) 11)	The specification is objected to by the Examiner The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction The oath or declaration is objected to by the Examiner 35 U.S.C. § 119	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).
a)[Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National Stage
2) Notic 3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	

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DETAILED ACTION

Applicant's response to the examiner's office action in the reply filed on 01/10/2005 is acknowledged.

Claims 9-11, 15-35, 37-40, 45, 46, and 49-51 have been canceled as they are drawn to non-elected inventions. Claims 4, 5, 13, and 47 have been canceled as requested in the reply filed on 01/10/2005.

Claims 1-3, 6-8, 12, 14, 36, and 41-44 have been amended.

Claims 1-3, 6-8, 12-14, 36, 41-44, and 48 are currently under examination.

This application claims priority from the PCT/GB00/022457, which claims foreign priority to the United Kingdom 9915215.9 filed on 06/29/1999, and 9930536.9 filed on 12/23/1999.

Rejections Withdrawn

35 USC § 101

The rejection of Claims 41-44 is withdrawn because the Applicant amended the claims to be in proper form for the method claims reciting steps involved in the process.

The rejection of Claims 1-3, 6-8, 12, 14, 36, 41-44, and 48 is withdrawn because the Applicant amended the claims to recite that the claimed protein is isolated.

Claim Rejections - 35 USC § 112, first paragraph

The rejection of Claims 12, 36, and 47 is withdrawn because the Applicant amended the claims to "an insecticidal CRY protein" and canceled the phrase: "further protein."

Rejections Maintained

Claim Rejections - 35 USC § 112, first paragraph

The rejection of Claim 36 is maintained because examiner cannot search the "the FASTA opt score greater than 109."

In the first office action examiner stated that Claim 36 refers to FASTA search, and claims "a FASTA opt score greater than 109." However, the specification does not describe how to interpret the values from the FASTA search, and specifically how to interpret the significance of the 109 value. See page 12, lines 1-18 of the specification. Claim 36 refers to FASTA opt score greater than 109 when compared with SEQ ID NO:1. However, the specification lists only different FASTA opt scores that are greater than: 109, 110, 115, 117, 119, 120, 130, 140, and 150; where 150 is the last given value. See page 12, lines 1-18. Claim 36 encompasses any value larger than 109, and thus the specification does not clearly allow persons of ordinary skill in the art to recognize that the Applicant invented what is claimed.

The Applicant's argument states that the FASTA analysis is well known in the art and that the skilled person in the art would know that the higher the FASTA opt score the higher the percentage identity between the sequences being compared.

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59.

Examiner respectfully disagrees with the Applicant and maintains the rejection of Claim 36 because the examiner cannot perform a proper search using the USPTO search databases, and thus the examiner cannot accurately, diligently and correctly perform an adequate evaluation and interpretation of the claim at issue. Thus, Claim 36 is unsearchable and therefore unpatentable under the current status.

New Rejections

35 USC § 112, second paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1, 3, 14, and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 36 is rejected because it uses a Trademark name: "FASTA," and Trademark names are unpatentable.

In Claim 1, the sequence identification should be changed to SEQ ID NO:1.

In Claim 3, the sequence identification should be changed to SEQ ID NO:2.

In Claim 14, the sequence identification should be changed to SEQ ID NO:54 to

In Claim 36, the sequence identification should be changed to SEQ ID NO:1.

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35 USC § 102(b)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Tailor et al., "Identification and characterization of a novel Bacillus thuringiensis δ-endoxin entomocidal to coleopteran and lepidopteran larvae, Mol. Microbiol., (1992), 6, 1211-1217.

Tailor et al. disclose amino acid sequence that is 100% identical to the SEQ ID NO :55. See Figure 2, page 1213.

Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Shin et al. "
Distribution of cryV-Type Insecticidal Protein Genes in Bacillus thuringiensis and
Cloning of cryV-Type Genes from Bacillus thuringiensis subsp. kurstaki and bacillus thuringiensis subsp. entomocidus, Appl. Environ. Microbiol., (1995), 61, p. 2402-2407.

Shin et al. discloses amino acid sequence that is 100% identical to the SEQ ID NO:56 and SEQ ID NO:59. See Figure 3, page 2405.

Conclusion

No claims are allowed.

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SEQ ID NO:1 and SEQ ID NO:2 are free of art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agnes Rooke whose telephone number is 571-272-2055. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-0925.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR or Public PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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KAREN COCHRANE CARLSON, PH.D PRIMARY EXAMINER Page 6